

UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA

BARBARO TECHNOLOGIES, LLC,  
Plaintiff,  
v.  
NIANTIC, INC.,  
Defendant.

Case No. [18-cv-02955-RS](#)

**ORDER CONSTRUING CLAIMS**

**I. INTRODUCTION**

Interactive virtual thematic environments rendering real-time information form the backdrop of this patent dispute. Such environments are used, for present purposes, in computer gaming. Plaintiff Barbaro Technologies holds two closely related patents on such environments, US 7,373,377 (“’377 Patent”) and US 8,228,325 (“’325 Patent”), filed in 2004 and 2008, respectively. The ‘377 Patent is more general; the ’325 Patent focuses on the specific case of integrating real-time location information into a three-dimensional environment. Barbaro contends that defendant Niantic’s Ingress and Pokemon Go games infringe on both patents. The parties seek construction of ten terms, pursuant to *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995) (en banc). A hearing was held on January 31, 2020. The terms are construed as explained below.<sup>1</sup>

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<sup>1</sup> Barbaro requests that judicial notice be taken of portions of the prosecution history. Niantic objects to the request only to the extent that Barbaro would like fractions of documents to be noticed, whereas Niantic would prefer the entire documents be noticed. Neither party disputes that the documents, as court records, can accurately and readily be determined from authoritative

## II. LEGAL STANDARD

### A. Claim Construction

Claim construction is a question of law to be determined by the Court. *Markman*, 52 F.3d at 979. “Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (quoting *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998)). Accordingly, a claim should be construed in a manner “that stays true to the claim language and most naturally aligns with the patent’s description of the invention.” *Id.* (quoting *Renishaw*, 158 F.3d at 1250).

The first step in claim construction is to look to the language of the claims themselves. “It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Phillips*, 415 F.3d at 1312 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). A disputed claim term should be construed in a manner consistent with its “ordinary and customary meaning,” which is “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Id.* at 1312–13. The ordinary and customary meaning of a claim term must consider the context of the claim’s overall language. *See id.* at 1314 (“[T]he use of a term within the claim provides a firm basis for construing the term.”). Additionally, the use of the term in other claims may provide guidance regarding its proper construction. *Id.*

A claim should also be construed in a manner that is consistent with the patent’s specification. *See Markman*, 52 F.3d at 979 (“Claims must be read in view of the specification, of which they are a part.”); *see also Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996) (“[T]he specification is always highly relevant to the claim construction analysis.”). In limited circumstances, the specification may be used to narrow the meaning of a claim term that

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sources. Fed. R. Evid. 201(b). Thus, each document will be noticed in its entirety.

otherwise would appear to be susceptible to a broader reading. *See SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1341 (Fed. Cir. 2001). Courts may not, however, impose limitations that are not supported by the language of the claim. *Laitram Corp. v. NEC Corp.*, 163 F.3d 1342, 1347 (Fed. Cir. 1998) (“[A] court may not import limitations from the written description into the claims.”); *Comark Commc’ns., Inc. v. Harris Corp.*, 156 F.3d 1182, 1186 (Fed. Cir. 1998) (“[C]laims are to be interpreted in light of the specification, [but] it does not follow that limitations from the specification may be read into the claims.”); *SRI Int’l v. Matsushita Elec. Corp. of Am.*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc) (“It is the *claims* that measure the invention.”) (emphasis in original).

A final source of intrinsic evidence is the prosecution history and any statements made by the patentee to the United States Patent and Trademark Office (“PTO”) regarding the scope of the invention. *See Markman*, 52 F.3d at 980. Courts may also consider extrinsic evidence, such as expert testimony, dictionaries, or technical treatises, especially if such sources are “helpful in determining ‘the true meaning of language used in the patent claims.’” *Phillips*, 415 F.3d at 1318 (quoting *Markman*, 52 F.3d at 980). While extrinsic evidence may aid the claim construction analysis, it cannot be used to contradict the plain and ordinary meaning of a claim term as defined within the intrinsic record. *Phillips*, 415 F.3d at 1322–23.

## **B. Indefiniteness**

Where a claim cannot be given a construction that satisfies 35 U.S.C. § 112,<sup>2</sup> courts not infrequently will find it invalid during claim construction. *See, e.g., Praxair, Inc. v. ATMI, Inc.*, 543 F.3d 1306, 1319 (Fed. Cir. 2008) (“Indefiniteness is a matter of claim construction, and the same principles that generally govern claim construction are applicable to determining whether allegedly indefinite claim language is subject to construction.”); *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1368–69 (Fed. Cir. 2014) (affirming a finding of indefiniteness in the district

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<sup>2</sup> All patents in dispute were issued from applications filed before March 16, 2013. Therefore, pre-AIA 35 U.S.C. §112(2) applies. However, the language of the statute did not change. *Compare* 35 U.S.C. §112(b) (2012), *with* 35 U.S.C. §112(2) (2006 & Supp. IV 2011).

court's claim construction order). "Indefiniteness must be proven by clear and convincing evidence." *Sonix Tech. Co., Ltd. v. Publ'ns Int'l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017).

"[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). Definiteness "entails a delicate balance." *Id.* at 909 (internal quotations and citation omitted). "On the one hand, the definiteness requirement must take into account the inherent limitations of language." *Id.* "[A]bsolute precision is unattainable." *Id.* at 910. "At the same time, a patent must be precise enough to afford clear notice of what is claimed, thereby appris[ing] the public of what is still open to them." *Id.* at 909 (internal quotations and citation omitted). Thus, "the certainty which the law requires in patents is not greater than is reasonable, having regard to their subject-matter." *Id.* at 910. "[T]he dispositive question in an indefiniteness inquiry is whether the claims, not particular claim terms" fail the *Nautilus* test. *Cox Commc'ns, Inc. v. Sprint Commc'n Co. LP*, 838 F.3d 1224, 1231 (Fed. Cir. 2016) (internal quotations and citation omitted). For that reason, a claim term that "does not discernably alter the scope of the claims" may not render the patent indefinite. *Id.* Claims should be evaluated for indefiniteness considering the specification and prosecution history. *Id.* at 1229. However, "[a]s indefiniteness analysis involves general claim construction principles, [courts] begin with the language of the claims." *Sonix*, 844 F.3d at 1378.

### III. DISCUSSION

#### 1. "graphics user interface (GUI) module"

This term appears in several claims of the '377 Patent. The primary dispute is whether, as Barbaro says, the GUI must "*includ[e]* user-input controls," or whether, as Niantic says, the GUI merely "*processes* user inputs." The claims do not themselves answer this question. However, the specification is informative. It teaches that the GUI "provides...user input stream[s]," '377 Patent at 15:10, that "[o]ne side task of the graphic engine of the GUI...is to collect user input," *id.* at 15:25–26, and that the "user interacts completely with the GUI," *id.* at 15:30. The specification

also explains that the “GUI...has all the data related to the user’s manipulation of the selection means, including any keyboard strokes, use of a pen, joystick, interactive goggles, touch screen or any other interactive hardware component.” *Id.* at 15:36–40. The specification thus suggests that the GUI is responsible for collecting all user input—whether that input comes from controls within the GUI itself, or from external hardware components such as a keyboard or a joystick. That is, the GUI *can* contain *some* of the user-input controls, but it *need* not contain *any or all* of them. Thus, this term will be construed as “software that provides a graphical display and processes user inputs to allow a user to interact with the graphical display.”

2. “quantum imaging environment (QIE) module”

This term also appears in several claims of the ‘377 Patent. The parties have stipulated that “quantum imaging environment” has no plain meaning, and they agree that the claims themselves do not define the term. The crux of their debate, then, is whether the specification offers a construction, as Barbaro argues, or, as Niantic argues, the term is indefinite.<sup>3</sup>

In order to demonstrate indefiniteness, Niantic must show by clear and convincing evidence that the term would fail to inform a person skilled in the art (“POSITA”) in 2004, the date of the invention, of its scope with reasonable certainty. *Nautilus*, 572 U.S. at 901. Niantic’s principle argument is that the dozens of embodiments, and relatedly, descriptions of the QIE, in the specification cannot be reconciled. However, while the ‘377 Patent is not a model of clarity, that the various explanations of the QIE within it are not identical does not automatically make the claim indefinite for at least three reasons.

First, courts “do not read limitations from the embodiments in the specification into the claims.” *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014). Given the dozens of embodiments in the ‘377 Patent, to read each limitation from each embodiment into the

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<sup>3</sup> Barbaro objects that deciding invalidity at this juncture, as opposed to summary judgment, is inappropriate. While Barbaro cites ample proof for the proposition that invalidity *may* be decided at summary judgment, it does not and cannot cite any authority for the proposition that it *must*. Numerous courts—this one included—have considered invalidity, in appropriate circumstances, at claim construction.

1 claim terms would invalidate the entire patent—which is not the purpose of claim construction.  
2 The summary of the invention, in contrast, offers a clear definition of what the QIE does:  
3 “interprets content such that the content is manipulated and accessed by any device.” ‘377 Patent  
4 at 4:20–22. Why would a POSITA search for indefiniteness within the sea of embodiments when  
5 the specification offers clarity upfront?

6 Second, the descriptions of the QIE in the various embodiments are not necessarily  
7 inconsistent. Niantic’s list of the definitions offered throughout the patent in fact illustrates that the  
8 definitions are largely consistent. For example, various embodiments state that the QIE transmits,  
9 processes, re-rasterizes, sends, recalculates, requests, and passes on the information. These verbs  
10 are not inconsistent; rather, they create a coherent picture of a module that receives information,  
11 processes it, and then sends it along to the next layer of software. This picture is confirmed by the  
12 figures in the patent depicting various embodiments, which each show the QIE at the center of  
13 other modules. *See* ‘377 Patent at Figures 1, 2, 4, 5.

14 Third and finally, while Niantic has pointed out some ambiguity in the specification, as  
15 discussed above, it has not met the more exacting legal standard for indefiniteness. That is, it has  
16 not shown *by clear and convincing evidence* that a POSITA would lack reasonable notice of what  
17 a QIE is. Niantic seeks “absolute precision,” and certainty greater than what is reasonable, which  
18 the Supreme Court has said is not required. *Nautilus*, 572 U.S. at 901. Niantic also focuses on the  
19 alleged indefiniteness of the term “QIE module,” without exploring that the claim *as a whole*—as  
20 the indefiniteness standard requires—can be discerned. In short, the term is not indefinite.

21 As to what construction should be adopted, Niantic declined to offer an option. It instead  
22 accused Barbaro of “cherry-picking” a construction out of an ambiguous field. Barbaro’s expert  
23 admitted during his deposition that the construction Barbaro is proposing does not perfectly  
24 encompass *every* embodiment in the specification. *See* Deposition Upon Oral Examination of Dr.  
25 Craig Rosenberg, ECF No. 90-2, at 69 (“Rosenberg Deposition”). It instead identifies aspects of  
26 the QIE that are “prevalent in the description of the invention,” *id.*—put differently, it identifies  
27 the “common denominator” among the embodiments, *id.* at 107—to isolate the principle function

of the QIE as a “universal translator,” *id.* at 69. Rather than cherry-picking, Barbaro’s proposal mimics what a POSITA would have done to understand what was being claimed with reasonable certainty: read through the embodiments as *example* implementations and from them understand the “common denominator” of the invention.

Thus, Niantic has not met its burden. The term will be construed as “a software layer which receives and interprets content such that the content is manipulated so as to be accessible on different types of devices for use within the virtual thematic environment.”

### 3. “digital logic library”

This term also appears in several claims of the ‘377 Patent. The parties have stipulated that the term has no plain meaning and agree that it is not a term of art. Niantic again contends that the term is indefinite. Barbaro seems to concede that the claims themselves do not define the term but instead argues that a definition can be divined from the specification and prosecution history—though the term is used nowhere in the specification.<sup>4</sup> The specification, says Barbaro, makes it clear that the “digital logic library” is a combination of the “digital content library” and the “thematic/publishing logic;” therefore, Barbaro’s construction of the term combines the specification’s given definitions for those two components.

Neither the specification nor the prosecution history is as clear as Barbaro makes them out to be. As to the specification, even if a POSITA were able to divine that the “digital logic library” is some combination of components in the invention, and even if, given the labels on the ‘377 Patent’s Figure 1—which depicts only one possible embodiment—the most obvious component parts *in that embodiment* are the “digital content library” and “thematic/publishing logic,” what about the other figures? For example, Figure 2 depicts “thematic/app publishing logic library,” “thematic/publishing logic,” “digital content library,” and “business logic” components. Figure 3 depicts no fewer than nine libraries, plus a “thematic app/pub/game content” module. How is a

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<sup>4</sup> While “digital *content* library” is used throughout, “digital *logic* library” appears nowhere. The parties have stipulated that “content” and “logic” do not mean the same thing.



1 POSITA to know which of these combines into the “digital logic library,” especially when the  
 2 term appears nowhere in the specification? As to the prosecution history, Barbaro argues that  
 3 because the originally filed claims used the terms “thematic/publishing logic” and “digital content  
 4 library,” and the subsequently filed claims instead used the term “digital logic library,” a POSITA  
 5 would have been on notice that the latter was a two-for-one replacement for the former. However,  
 6 the originally filed claims were not revised; rather, after they were denied, they were withdrawn  
 7 and replaced. This two-for-one swap is not apparent.

8 Thus, “digital logic library” has no plain meaning, nor is it clearly defined by either the  
 9 specification or the prosecution history. Given this lack of guidance, a POSITA would not know  
 10 with reasonable certainty what the term means. It is thus indefinite.

11 4. “*real-time information*”

12 This term appears throughout the ‘377 and ‘325 Patents. The specifications contain  
 13 numerous examples of “real-time information”: for example, sports scores, live sports events, live  
 14 radio, live television, news, or a clock. *See, e.g.*, ‘377 Patent at 6:55–57, 9:43–45, 31:43–45,  
 15 33:44–46. The parties agree that the term should be given its plain and ordinary meaning. Barbaro  
 16 proposes a construction that it contends comports with that concept, while Niantic argues no  
 17 construction need be adopted.

18 Barbaro’s construction does not reflect the plain and ordinary meaning of the term in at  
 19 least two ways. First, Barbaro says that real-time information is updated “after new information  
 20 becomes available.” If that were true, then, for example, a sports score that is refreshed at set  
 21 intervals—say every five minutes—would be “real-time” since it would be updated every time a  
 22 data fetch produces new information. But if a sports fan were to discover that the purported “real-  
 23 time” score they were tracking in fact lagged up to five minutes behind the game, that would  
 24 surely contradict their expectations regarding the plain and ordinary meaning of “real-time.”  
 25 Second, and similarly, Barbaro’s construction states that real-time information “*includes* live  
 26 information.” The plain and ordinary meaning of the term, however, is that real-time information  
 27 *is* live information; there is no real-time information that is *not* live.



1 The examples in the specifications—live television or radio, sports scores, a clock—  
2 demonstrate that, in the context of the patents, the term takes on its plain and ordinary meaning.  
3 Thus, no construction need be adopted.

4 5. “[three-dimensional] virtual thematic environment”

5 This term appears throughout the ‘377 and ‘325 Patents. The parties have stipulated that  
6 “virtual thematic environment” has no plain and ordinary meaning, and Barbaro has conceded that  
7 it is not a term of art. Niantic argues that, while “virtual environment” is definable, the word  
8 “thematic” makes the whole term indefinite.

9 When evaluating terms for indefiniteness, courts have distinguished between “purely  
10 subjective” terms and “term[s] of degree.” *Sonix*, 844 F.3d at 1378. “Purely subjective” terms are  
11 indefinite because the term is “completely dependent on a person’s subjective opinion.” *Datamize,*  
12 *LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1352 (Fed. Cir. 2005), *abrogated on other*  
13 *grounds by Nautilus*, 134 S. Ct. 2120. For example, the Federal Circuit found “aesthetically  
14 pleasing” to be purely subjective and indefinite because its meaning depended “on the  
15 unpredictable vagaries of any one person’s opinion.” *Id.* at 1350. The Federal Circuit similarly  
16 found “in an unobtrusive manner that does not distract” to be indefinite because the claim  
17 language offered “no objective indication” of what the phrase meant; the single example offered in  
18 the specification could not save the term because it still left a POSITA “to wonder what other  
19 forms of display [were] unobtrusive and non-distracting.” *Interval Licensing*, 766 F.3d at 1374.  
20 *See also DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1260 (Fed. Cir. 2014) (“For  
21 some facially subjective terms, the definiteness requirement is not satisfied by merely offering  
22 examples that satisfy the term within the specification.”). “For other terms like...terms of degree,  
23 specific and unequivocal examples may be sufficient to provide a skilled artisan with clear notice  
24 of what is claimed.” *Id.* For example, “visually negligible” was found not indefinite because the  
25 patent specification provided “guidance on how to create visually-negligible indicators” and  
26 “specific examples that provide points of comparison for the result.” *Sonix*, 844 F.3d at 1379. That  
27 is, there existed “an objective baseline through which to interpret the claims.” *Id.* at 1378.

Whether something is “thematic” is not “*completely* dependent on a person’s subjective opinion.” *Datamize*, 417 F.3d at 1352 (emphasis added). As the parties agreed at the hearing, for example, a 1980’s dinner party is clearly thematic; a floor with a grid, as Barbaro’s expert opined, is clearly not, *see* Rosenberg Deposition, at 143. While “thematic” may be a term of degree, examples provided throughout the specification and prosecution history delineate what the patents meant by the term. For example, the ‘377 Patent specification enumerates examples: “a travel website or geographically themed game,” *see* ‘377 Patent at 27:8–10, “a game, or a particular website, such as a museum website, store, school, hospital, etc.,” *id.* at 7:10–12, or “a store, hotel, or museum,” *id.* at 8:44–45. These examples provide a POSITA “guidance on how to create” a thematic environment and “points of comparison for the result.” *Sonix*, 844 F.3d at 1379. The prosecution history confirms that the term is not indefinite; the PTO initially rejected the claims at issue because it found “virtual thematic environment” to be indefinite, but withdrew its rejection when Barbaro pointed to clarifying language in the application.

Only Barbaro proposes a construction for “virtual thematic environment.” Niantic objects to the part of Barbaro’s construction which specifies that the environment “may take the form of a game.” Barbaro conceded at the hearing that this phrase is not necessary to the construction. The remainder of Barbaro’s construction can be adopted without this additional phrase.

The final issue is what to do with the sub-term “three-dimensional.” Barbaro contends that the phrase refers to how the user perceives the environment—that is, an environment can be three-dimensional even if displayed on a two-dimensional screen if some part of its rendering appears three-dimensional to a user. Niantic contends that three-dimensional refers to physical space, and thus limits the term to holographic environments and other three-dimensional spaces.

“Three-dimensional” appears only in the ‘325 Patent. The claims themselves do not explain what it means. The specification contemplates three-dimensional spaces such as a “cinematic room,” “warehouse environment,” or “holographic environment.”<sup>5</sup> It also contemplates

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<sup>5</sup> The claims directed to the “holographic embodiment” were preemptively cancelled. However, those directed to “cinematic rooms” and “warehouse environments” were not.

two-dimensional renderings of three-dimensional objects. *See, e.g.*, ‘325 Patent at 10:14–16 (“The user may also experience the images in a 3D environment via the use of 3D goggles or other 3D devices.”). That is, according to the specification, a “three-dimensional” environment could refer either to physical space or to a user’s perception. Thus, Barbaro’s construction is preferable because it puts a floor on what is meant by “three-dimensional”—but encompasses anything above that floor, including cinematic rooms, warehouse environments, or holographic environments. Thus, the disputed term will be construed as “a theme-based virtual computer interface [perceived by a user to include at least one feature displayed in three dimensions].”

6. *“the user’s geographical three-dimensional movement [through the three-dimensional virtual thematic environment]”*

This term appears in the ‘325 Patent. It is closely related to the prior term. The principle dispute is whether the “user’s geographical three-dimensional movement” in the virtual thematic environment need be “correlated to the user’s non-relative, actual real-world movement” (Barbaro), or not (Niantic). The specification seems to consider, but not require, this correlation. It contemplates the user controlling the virtual thematic environment by methods other than their own real-world movement, for example by voice command or via a display. *See* ‘325 Patent at 39:41–45. This makes sense because, as discussed above, other parts of the patent seem to contemplate not only an environment rendered in three-dimensions, but also a two-dimensional environment which the user *experiences* as three-dimensional. That is, the specification does not seem to require the user to move in the real world for the avatar to move in the virtual world. Thus, this term will be construed as “the user’s physical movement in three directions, i.e. front/back, left/right, and up/down [through the three-dimensional virtual thematic environment].”

7. *“secondary application within the primary application”*

This term appears in several claims of the ‘377 Patent. The parties have agreed that “application” means “computer program.” Both argue that their respective constructions merely reflect the plain and ordinary meaning of the term. For Niantic, that meaning is simply “secondary computer within the primary computer program. For Barbaro, that meaning is “an application,

different from the primary application (i.e. first application), which is launched from and is utilized within the same application environment as the primary application without having to close the primary application to launch the application.”

Barbaro appears to import unnecessary complexity into a term whose plain and ordinary meaning is otherwise clear. Separate from the limitation containing the disputed term, the claims recite additional limitations for “providing a first user interface that is associated with the primary application,” “enabling a user to access the at least one secondary application through the first user interface,” and “enabling the user to control the at least one secondary application through a second user interface.” See ‘377 Patent at 43:38–39, 57–60. Thus, Barbaro’s construction imports other limitations into a construction for the present limitation. To include these requirements when they are already delineated or at least implied elsewhere would fail to “giv[e] effect to all terms in the claim.” *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 950 (Fed. Cir. 2006). Cf. *Ecolab, Inc. v. Envirochem, Inc.*, 264 F.3d 1358, 1367 (Fed. Cir. 2001) (“Where a function is not recited in the claim itself by the patentee, we do not import such a limitation.”). Accordingly, Barbaro’s construction at least imports unnecessary complexity into an otherwise clear phrase, and probably renders other limitations superfluous. The term will be given its plain and ordinary meaning and construed as “secondary computer program within the primary computer program.”

8. *“enabling the user to control the at least one secondary application through a second user interface”*

This term appears in several claims of the ‘377 Patent. The parties have jointly agreed that the similar term “enabling a user to access the at least one secondary application through the first user interface” means “enabling a user to access the at least one secondary computer program through the first user interface.” That adopted construction, like Niantic’s proposed constructions for the prior and present disputed terms, simply replaces “application” with “computer program.” Barbaro again offers a lengthier construction. For the same reasons applicable to the prior disputed term, Barbaro’s construction is at least unnecessarily complex, and likely renders other limitations superfluous. Furthermore, Barbaro has not explained why its lengthy construction is necessary

1 when the adopted construction for a term very similar to the disputed term simply replaces  
2 “application” with “computer program.” That is, Barbaro has not demonstrated clear lexicography  
3 or disavowal. Therefore, this term will be given its plain and ordinary meaning and construed as  
4 “enabling the user to control the at least one secondary computer program through a second user  
5 interface.”

6 9. “*world wide web*”

7 This term appears in several claims of the ‘377 Patent. The parties’ principle disagreement  
8 is whether the “world wide web” should be defined by its use of the HTTP/HTTPS transportation  
9 protocols (Barbaro) or as a set of webpages (Niantic). The claims themselves focus on the web’s  
10 function as a transportation network; they reference “sending a request for...real-time  
11 information” to, “obtaining...real-time information via,” and “downloading...real-time  
12 information from” the “world wide web.” *See* ‘377 Patent at 43:40–45. None of Niantic’s  
13 arguments in favor of its construction are to the contrary. Instead, they impermissibly offer  
14 extrinsic evidence to contradict the intrinsic record, *see Phillips*, 415 F.3d at 1322–23. Niantic also  
15 accuses Barbaro’s construction of being simultaneously too broad, because the HTTP/HTTPS  
16 transport protocols are used beyond the world wide web, and too narrow, because the world wide  
17 web is more than a transport protocol. However, Niantic’s own construction suffers from these  
18 same flaws: there are webpages on the Internet that are not a part of the world wide web, and the  
19 world wide web is not just a set of webpages. Ultimately, the term must be construed consistent  
20 with the claims, which focus on the web’s transportation capacities. Thus, this term will be  
21 construed as “an aspect of the internet using web-based protocols such as HTTP and HTTPS.”

22 10. “*external sources*”

23 This term appears in the ‘325 Patent. The parties disagree about what “external” means.  
24 Niantic adopts a stricter definition: “external” means outside of any of the clients and servers  
25 comprising the claimed system. Barbaro says information is “external” as long as it is outside the  
26 immediate memory running a program. For example, if the claimed system were to store  
27 information on a distributed server, as the patent contemplates, *see* ‘325 Patent at 14:10, Niantic

1 would say this information was “internal” while Barbaro would say it was “external.”

2 The claims themselves do not make it clear what “external” modifies: “at least one  
3 memory,” according to Barbaro, or “virtual thematic environment,” responds Niantic. However,  
4 they do contemplate the aforementioned memory running a program that fetches information  
5 “from external sources over the internet.” ‘325 Patent at 42:42–43. In order not to render any of  
6 that language superfluous, something that is “external” cannot merely be something fetched “over  
7 the internet.” Yet, by arguing that anything outside of the memory running the program, i.e. that  
8 must be fetched over the internet, is external, Barbaro does precisely that. Specifically, it renders  
9 “external” and “over the internet” duplicative. Niantic, on the other hand, allows for information  
10 on a distributed server, which must be fetched over the internet, to be internal—that is, it defines  
11 “external” and “fetched over the internet” differently. This interpretation “giv[es] effect to *all*  
12 terms in the claim.” *Bicon*, 441 F.3d at 950 (emphasis added).

13 Furthermore, the specification makes it clear that “external sources” are those which are  
14 external to the “virtual thematic environment.” *See, e.g.*, ‘325 Patent at Abstract, 2:43–44 (both  
15 discussing information fetched “from a source external to the virtual thematic environment”). The  
16 virtual thematic environment can run across multiple clients and servers. *See id.* at Figures 3–7.  
17 Anything “external” to the environment must therefore be external to all those clients and servers,  
18 which is precisely Niantic’s construction. Accordingly, this term will be construed as “sources  
19 outside of the clients and servers of the claimed computer system.”

#### 20 IV. CONCLUSION

21 The disputed terms are construed as set forth above. Furthermore, the constructions the  
22 parties have jointly agreed upon for “enabling a user to access the at least one secondary  
23 application through the first user interface,” “simulated real-world interaction,” and “real-world  
24 geographic location” are adopted. The action shall proceed in accordance with these constructions.

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26 **IT IS SO ORDERED.**

Dated: February 12, 2020

  
RICHARD SEEBORG  
United States District Judge

United States District Court  
Northern District of California

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